Technical Data Sheet

	1
Bridge Identification:	1581510000000R03
Facility Carried:	I-75
Feature Intersected:	Raisin River
Location:	Frenchtown Township
County:	Monroe
Region:	University
Year Built:	1955
Year Reconstructed:	1987
Bridge Type:	Riveted Plate Girder System
No. of Spans:	11
Deck Area:	105,525 S.F.
Paint System:	Type 1
Paint Area:	260,500 S.F.



Plan View Looking North (1)

Fracture Critical Members

- 1. Pin and Hanger Assemblies
- 2. Tension Areas of Main Girders

Fatigue Sensitive Details

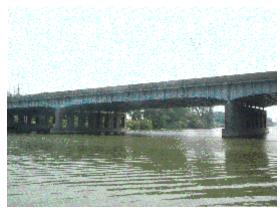
- 1. Floorbeam-to-Girder Connections
- 2. Lateral Bracing-to-Girder Connections

General Bridge Description

Bridge R03 of 58151 is an eleven-span steel beam and riveted plate girder bridge carrying I-75 over the Raisin River in Frenchtown Township in Monroe County. The riveted plate girder spans measure 121'-0", 158'-0", and 121'-0" from south to north. At the south end of the bridge there are 6 steel beam approach spans ranging in length from 53'-0" to 75'-0". At the north end of the bridge there are 75'-0" and 50'-0" long approach spans. The overall length of the bridge is 930'-5". The out-to-out width of the deck is 113'-5", providing for four 12'-0" travel lanes in each direction. The bridge is supported by reinforced concrete abutments and rigid frame piers.

The floor system is comprised of longitudinal stringers and transverse floorbeams, which frame into the eight main longitudinal girders. Span 8 contains a 98'-0" long suspended span which is supported by pin and hanger assemblies at the end of the plate girders cantilevered from Spans 7 and 9.

The bridge was built in 1955. In 1987 the bridge was rehabilitated, which included painting and replacing the pins and hangers and joint seals.



West Elevation (2)



Floor system (3)

Inspection Checklists

For additional information and detailed inspection procedures, refer to the Inspection and Maintenance Program section of this manual.

Fracture Critical Members/Fatigue Sensitive Details

- **! Tension areas of main girders.** See Figure 1 in the Inspection and Maintenance Program section of this manual for tension areas of main girders.
- ! Pin and hanger assemblies. (Photo 4) The suspended span has moved eastward to its limit. The hanger plates at this location are rubbing under live load, causing some wear. The pins and hanger plates should be carefully inspected.



- ! Floorbeam-to-girder connections.
- ! Lateral bracing-to-girder connections.

Pin and Hanger (4)

Other

- ! Deck Joints. Monitor condition of these joints. Check seals for leakage.
- **! Bearings.** Inspect the bearing assemblies at the piers for signs of unusual wear or cracks. Inspect to ensure they are free to move as intended.

Maintenance Recommendations

Regularly Scheduled Maintenance Items

Recommendation	Schedule
Clean bridge drainage system components (deck drains and downspouts).	6 to 12 months
Flush bridge deck joints and check for and repair leaks.	12 months
Powerwash bridge superstructure and remove debris from around bearings.	12 months
Powerwash bearings and pin and hanger assemblies.	12 months